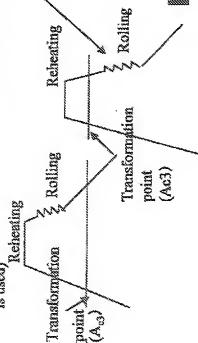


FOR EXPLANATORY PURPOSES ONLY

Toyooka patent

(When same seamless steel pipe of the present application is used)



Rolled at low temperature of transformation point or less and the structures are extended long in L direction and finer in cross section C.

L direction (Longitudinal direction of steel pipe)

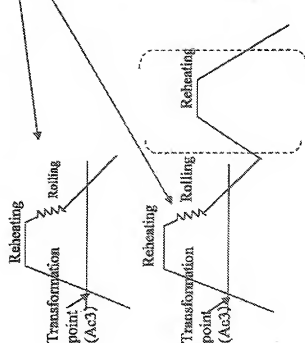


C direction (circumferential direction of steel pipe)



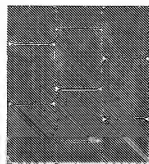
Microstructures are finer in C direction and extended long in L direction

Present invention

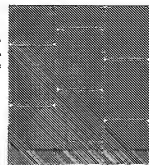


Rolled at a transformation point or more and the structure is recrystallized during cooling and becomes uniform.

L direction (Longitudinal direction of steel pipe)



C direction (circumferential direction of steel pipe)



Crystal grain size is large but uniform structures in L direction and in C direction